

Wilmer (W. H.)

A CASE OF EXCESSIVE MYOPIA TREATED BY
EXTRACTION OF THE TRANSPARENT LENS.

By WILLIAM HOLLAND WILMER, M.D., WASHINGTON, D.C.

AMONG the sufferers from very high degrees of myopia, there seems to be a general complaint of the inadequacy of glasses, and a corresponding willingness to assume almost any risk in the hope of obtaining better and more comfortable sight. I am often asked by excessively myopic patients (many of whom are totally ignorant of the possibility of removing the clear lens) if there is not *some* operation that could be performed to give them relief.

At the earnest solicitation of one of these sufferers, I performed the operation of extracting the transparent lens. I merely report this case as briefly as possible without referring at all to the literature upon the subject.

Miss S—, aged thirty-five, a teacher by profession, consulted me first on March 10, 1897. A German by birth and most intelligent, she was well acquainted with the literature of the operation, and, with full knowledge of its dangers, she was determined to have it performed.

Javal's ophthalmometer showed in each eye an astigmatism of 2.75 D with the rule, the axis of the correcting cylinder being at 10° in the right eye and at 180° in the left eye. The refraction was :
REV = $\frac{1}{200}$; with S — 25.0 D \bigcirc c — 2.50 D axis 10° = $\frac{20}{100}$
LEV = $\frac{3}{200}$; with S — 18.0 D \bigcirc c — 2.50 D axis 180° = $\frac{8}{80}$
A mydriatic did not change the refraction except in the left eye, where there was 1.0 D less of myopia. The strongest glass tolerated was S — 14.0 D \bigcirc c — 2.0 D axis 10° for the right eye, and S — 12. D \bigcirc c — 2.0 D axis 180° for the left eye. In each eye, there was a large posterior staphyloma, with additional areas of choroidal

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atrophy beyond the macular region, which, however, was free. There were no vitreous opacities.

Having again laid great stress upon the risks of the procedure, I promised Miss S—— to operate upon the right eye after the close of her school session.

June 22.—The pupil was thoroughly dilated with atropia, a 4% solution of cocaine used to anæsthetize the cornea, and the lens quite freely needled with Bowman's needle, great care being taken not to wound the vitreous. The needling was followed by ice applications and the instillation of a 1% solution of atropia three times a day. Neither pain nor inflammatory reaction ensued. There was only moderate swelling of the lens-substance.

June 27 (the fifth day after the needling).—The opaque lens was extracted without iridectomy. The incision was made above in the clear cornea about 2 mm within the sclero-corneal margin. Upon completing the section, the soft lens presented itself through the opening in the anterior capsule made by the previous needling, thus rendering the use of the cystotome inexpedient. No vitreous was lost, and the iris replaced itself without assistance. To prevent a prolapse of the iris, several drops of a solution of eserine, 1%, and cocaine, 10%, were instilled, and both eyes bandaged. The patient was kept in bed, and on soft diet. A cathartic had been administered the night before the operation.

June 28.—The bandage was removed, the eye washed with boric-acid solution, and both eyes were re-bandaged. There was no pain, the iris was in place, and the wound closed.

June 29.—Bandage removed, condition of the eye satisfactory, eye washed with boric-acid solution, and a drop of a 3% solution of atropia instilled. Order given for patient to sit up out of bed the next day. Eyes re-bandaged. The eye was dressed daily, washed with boric-acid solution, and atropia instilled. On the fifth day after the operation, the left eye was not re-bandaged, and on the eighth day, the bandage was left off the right eye and a 1% solution of atropia instilled three times a day. The healing was smooth and uneventful.

July 13.—An opaque capsule, which was not at all dense, covered the pupil. The field was complete and the eye free from all irritation. A dissection was made with Knapp's needle-knife, atropia used, and the right eye bandaged. There was practically no irritation following this procedure, and on the third day, the bandage was left off.

August 7.—There was still a slight bit of capsule covering the nasal portion of the pupil. The eye was free from pain. $V = \frac{1}{200}$, without a glass. The patient was allowed to leave the city for the summer.

September 4.—With Knapp's needle-knife, a free discission was made of the remaining portion of the capsule, atropia used, and the eye bandaged. The eye was dressed daily, and the bandage left off on the fourth day. Following this discission there was a slight iritis.

November 20.—The pupil was round, absolutely clear, and reacted perfectly. No irritation, no sensitiveness to light. Ophthalmometer showed an astigmatism of 1.25 D with the rule. $REV = \frac{2}{300}$; with S — 2.50 D \bigcirc c — 1.0 D axis $180^\circ = \frac{2}{300}$ —. Could read ordinary newspaper print with great ease at $10\frac{1}{2}$ inches without a glass. With S + 1.0 D \bigcirc c + 1.0 D axis 90 reads J. 1 at 8 inches with ease. Prescribed: RES — 2.25 D \bigcirc c — .075 D axis 180° ; LES — 12.0 D \bigcirc c — 2.0 D axis 180° . The patient was allowed to resume her work as a teacher.

December 18.—The patient is conscious of an improvement in her sight since her last visit. By actual test, the sight of the right eye is $\frac{2}{300}$ +, with the glass worn. With this correction, she uses the right eye for the distance, and the left eye for near work. She rejoices that she is no longer so absolutely dependent upon her glasses. She is using her eyes with great comfort, and is happy beyond expression. Furthermore, she is determined to have the left eye operated upon in June.

